HOUSE BILL 20-1072

A BILL FOR AN ACT

Concerning a requirement that Colorado institutions of higher education study potential uses of emerging technologies to more effectively manage Colorado's water supply, and, in connection therewith, making an appropriation, conditioned on the receipt of matching funds from gifts, grants, and donations.

Bill Summary

(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at http://leg.colorado.gov/.)

Water Resources Review Committee. The bill declares that new

House Committees
Rural Affairs & Agriculture
Appropriations

Senate Committees

Arndt and Saine, Catlin, Roberts, Titone, Becker, Bird, Bockenfeld, Buckner, Buentello, Champion, Duran, Esgar, Exum, Gonzales-Gutierrez, Lontine, McLuskie, McLachlan, Pelton, Sandridge, Valdez D., Will, Wilson, Woodrow, Young

Sonnenberg and Bridges, Coram, Donovan
technologies, such as blockchain, telemetry, improved sensors, and advanced aerial observation platforms, can improve monitoring, management, conservation, and trading of water and enhance confidence in the reliability of data underlying water rights transactions. To advance the potential use of these new technologies, the bill:

- Authorizes and directs the university of Colorado, in collaboration with the Colorado water institute at Colorado state university, to conduct feasibility studies and pilot deployments of these new technologies to improve water management in Colorado; and
- Appropriates $40,000 from the general fund, contingent on the university of Colorado's receipt of a matching $40,000 in gifts, grants, and donations, for the purpose of funding the studies and pilot programs.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. Legislative declaration. (1) The general assembly finds and determines that emerging new and improved technologies may offer significant benefits to Colorado water users and managers by:

(a) Improving the monitoring, management, conservation, and trading of both surface water and groundwater;

(b) Reducing inefficiency and waste in the process of recycling, reclaiming, or disposing of produced water and wastewater; and

(c) Allowing parties to water rights transactions to have more confidence in the data on which those transactions are based.

(2) Therefore, the general assembly declares that it is in the public interest to authorize and direct the university of Colorado, in collaboration with Colorado state university and the Colorado water institute, to conduct feasibility studies and pilot deployments of these technologies and to report to the general assembly on the potential of these technologies to improve Colorado water management.

SECTION 2. In Colorado Revised Statutes, add 23-20-141 as
follows:

23-20-141. Emerging technologies for water management - study - report - repeal. (1) (a) Subject to subsection (2) of this section and in collaboration with Colorado State University and the Colorado Water Institute created in section 23-31-801 or its successor, the University of Colorado shall conduct feasibility studies and pilot deployments of new and emerging technologies that have potential to improve the monitoring, management, conservation, and trading of surface water and groundwater and to reduce inefficiency and waste in the process of recycling, reclaiming, or disposing of produced water and wastewater.

(b) The technologies to be investigated by the universities pursuant to subsection (1)(a) of this section may include:

(I) In-situ sensors to monitor surface and groundwater use;

(II) Direct or remote sensors to monitor water quality;

(III) Cellular and satellite telemetry systems allowing remote access to sensor data;

(IV) Aerial observation platforms, including high-altitude balloons and unmanned aerial vehicles;

(V) Satellite-based remote sensing and water resource forecasting technologies; and

(VI) Blockchain-based documentation, communication, and authentication of data regarding water use, trading, and conservation.

(c) On or before July 15, 2021, and upon request of the
WATER RESOURCES REVIEW COMMITTEE IN ANY YEAR THEREAFTER, NOTWITHSTANDING SECTION 24-1-136 (11), THE UNIVERSITIES SHALL PROVIDE LIVE TESTIMONY AND A WRITTEN REPORT ON THE PROGRESS OF THE STUDIES AND PILOT DEPLOYMENTS CONDUCTED PURSUANT TO THIS SUBSECTION (1), INCLUDING ANY CONCLUSIONS REGARDING THE POTENTIAL OF THESE TECHNOLOGIES TO IMPROVE COLORADO WATER MANAGEMENT AND ANY RECOMMENDATIONS FOR ADMINISTRATIVE OR LEGISLATIVE ACTION TO PROMOTE THEIR USE, TO THE WATER RESOURCES REVIEW COMMITTEE OF THE GENERAL ASSEMBLY.

(d) Any feasibility studies or pilot deployments made pursuant to this section, and any recommendations for administrative or legislative action to promote the use of the technologies considered, must take account of the existing system of prior appropriation under Article XVI of the state constitution and Colorado water law.

(2) (a) The University of Colorado and Colorado State University may seek, accept, and expend gifts, grants, or donations from private or public sources for the purposes of this section. The universities shall not conduct the studies or pilot deployments described in subsection (1) of this section until they have received at least forty thousand dollars pursuant to this subsection (2). After the universities have certified to the state controller that the universities have received at least forty thousand dollars from gifts, grants, and donations for the purposes of carrying out this section, the general assembly shall appropriate an additional twenty thousand dollars from the general fund to each university.
(b) This subsection (2) will be repealed if the Universities determine that insufficient money has been received to satisfy the condition stated in subsection (2)(a) of this section. The universities shall notify the revisor of statutes in writing of the date on which a condition specified in this subsection (2) has occurred by e-mailing the notice to revisorofstatutes.ga@state.co.us. This subsection (2) is repealed, effective the September 1 following the date identified in the notice that the condition specified in this subsection (2) has occurred or, if the notice does not specify that date, following the date of the notice to the revisor of statutes.

(3) This section is repealed, effective July 1, 2022.

SECTION 3. In Colorado Revised Statutes, 23-31-801, amend (4)(e)(V) and (4)(f); and add (4)(g) as follows:

23-31-801. Colorado water institute - creation. (4) It is the duty of the institute to:

(e) Facilitate and stimulate scientific research and policy analysis that:

(V) Examines the interconnections between climate change, water supply, and water quality and provides tools water managers and policymakers need to adapt to global climate change; and

(f) Establish and maintain a clearinghouse and archive of water research, water quality, and climate projection data; and

(g) Collaborate with the University of Colorado and Colorado State University in studying the feasibility of new and improved water-related technologies in accordance with section 23-20-141.
SECTION 4. In Colorado Revised Statutes, 23-3.3-103, add (9) as follows:

23-3.3-103. Annual appropriations - repeal. (9) (a) The provisions of subsection (1) of this section concerning appropriations for student financial assistance under this article 3.3 do not apply to appropriations made for the purpose of conducting feasibility studies and pilot programs to investigate emerging technologies for water management pursuant to section 23-20-141.

(b) This subsection (9) is repealed, effective July 1, 2022.

SECTION 5. In Colorado Revised Statutes, 23-18-308, amend (1)(f); and add (1)(h) as follows:

23-18-308. Fee-for-service contracts - limited purpose - repeal. (1) Subject to available appropriations, the department shall enter into fee-for-service contracts for the following purposes:

(f) Providing services to maximize concurrent enrollment across the community college system as provided in section 23-60-202.7; and

(h) The conduct of feasibility studies and pilot programs to investigate emerging technologies for water management pursuant to section 23-20-141. This subsection (1)(h) is repealed, effective June 30, 2022.

SECTION 6. Appropriation. (1) For the 2020-21 state fiscal year, $40,000 is appropriated to the department of higher education. This appropriation is from the general fund. To implement this act, the department may use this appropriation for the college opportunity fund program to be used for limited purpose fee-for-service contracts with state institutions.
(2) For the 2020-21 state fiscal year, $40,000 is appropriated to the department of higher education. This appropriation is from reappropriated funds received from the limited purpose fee-for-service contracts with state institutions under subsection (1) of this section. To implement this act, the department may use this appropriation for the regents of the university of Colorado and of Colorado state university.

SECTION 7. Act subject to petition - effective date. (1) Except as otherwise provided in subsection (2) of this section, this act takes effect at 12:01 a.m. on the day following the expiration of the ninety-day period after final adjournment of the general assembly (August 5, 2020, if adjournment sine die is on May 6, 2020); except that, if a referendum petition is filed pursuant to section 1 (3) of article V of the state constitution against this act or an item, section, or part of this act within such period, then the act, item, section, or part will not take effect unless approved by the people at the general election to be held in November 2020 and, in such case, will take effect on the date of the official declaration of the vote thereon by the governor.

(2) Section 6 of this act shall only take effect if the university of Colorado certifies in writing to the state controller that the university has received at least forty thousand dollars ($40,000) in gifts, grants, and donations for the purposes of this act. After receiving this certification, the state controller shall notify the joint budget committee in writing that the state controller has received the certification from the university.